May 24, 2005

Standing Committee on Agriculture, Forestry and Environment
First Report Second Session Sixty-second General Assembly
Genetically Modified Organisms

Mr. Speaker and Members of the Legislative Assembly:

Committee Mandate

The Standing Committee on Agriculture, Forestry and Environment is charged with matters concerning agriculture, forestry and the environment.

On December 16, 2004, the following motion was passed in the Legislative Assembly of Prince Edward Island:

> WHEREAS developments in the field of biotechnology have made possible the introduction of genetically modified organisms (GMOs); living modified organisms (LMOs); transgenic organisms and genetically engineered organisms;
>
> AND WHEREAS developments in biotechnology have broad agricultural, aquacultural, industrial, medical and other applications;
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> AND WHEREAS such organisms are said to have the potential to provide significant benefits to human health, nutrition, the economy and the environment;
>
> AND WHEREAS Health Canada has been approving the use of GMO crops since 1995, based on their safety for human health and the environment;
>
> AND WHEREAS Canada is the third-largest producer of genetically modified organisms in the world;
>
> AND WHEREAS Prince Edward Island has the potential to increase the research, development and application of GMOs and other biotechnologies;
>
> AND WHEREAS notwithstanding their ongoing utilization and development, the introduction of products based on GMOs has raised a number of scientific, economic, social, environmental and ethical concerns;
>
> AND WHEREAS these concerns have had an impact on the acceptance of GMOs in the marketplace;

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AND WHEREAS some jurisdictions in the United States, Europe and Australia have proposed or implemented restrictions and regulations on the production and marketing of GMO products;

AND WHEREAS some jurisdictions have developed systems for the co-existence between certain GMOs and conventional crops;

AND WHEREAS there may be a market advantage in producing products that are GMO-free;

AND WHEREAS Prince Edward Island is seeking ways to differentiate its agricultural, fisheries and aquacultural food products in the marketplace;

AND WHEREAS there are passionate opinions on both sides of this question;

THEREFORE BE IT RESOLVED that the Legislative Assembly of Prince Edward Island refer this question to the Standing Committee on Agriculture, Forestry and Environment and to direct said committee to seek public input on this issue;

THEREFORE BE IT FURTHER RESOLVED that the Standing Committee submit a progress report back to the Legislative Assembly during the spring session of 2005.

Committee Membership

Permanent members of your Committee are:

Wilbur MacDonald, Chairman (District 6, Belfast-Pownal Bay)
Wilfred Arsenault (District 24, Evangeline-Miscouche)
Richard Brown (District 12, Charlottetown-Kings Square)
Ron MacKinley (District 16, North River-Rice Point)
Fred McCardle (District 19, Borden-Kinkora)
Andy Mooney (District 1, Souris-Elmira)
Hon. Mitch Murphy, Provincial Treasurer (District 20, Kensington-Malpeque)
Eva Rodgerson (District 25, West Point-Bloomfield)

Substitute members included:

Jim Bagnall (District 4, Montague-Kilmuir)
Wayne Collins (District 15, Winsloe-West Royalty)
Cletus Dunn (District 26, Alberton-Miminegash)
Helen MacDonald (District 22, St. Eleanors-Summerside)

Summary of Committee Activity

Your Committee held nine meetings to consider this matter: January 10, January 19, February 2, February 9, February 16, February 23, March 2, March 9 and May 19, 2005.

On **January 10, 2005**, your Committee met to formulate its work plan. Your Committee agreed to place an advertisement in the newspapers across the province to request public opinion on the issue. As a result of this decision, an advertisement soliciting the views of the public appeared in the *Guardian* and the *Journal-Pioneer* on January 15 and January 17, 2005. On January 19, 2005, the ad appeared in the *East Prince Graphic*, the *Western Graphic* and, in a French language version, in *La voix acadienne*. In conjunction with this effort, comprehensive information concerning the work of your Committee and additional resource information was posted on the website of the Legislative Assembly (www.assembly.pe.ca). At this meeting, your Committee also agreed to request research and writing assistance from a staff person from the provincial Department of Agriculture, Fisheries and Aquaculture.

At its next meeting, on **January 19, 2005**, Committee members were provided with a briefing binder prepared by staff at the Department of Agriculture, Fisheries and Aquaculture, and the staff at Technology PEI. Louise Polland, a policy analyst with the Department, highlighted various sections of the material which included information on opportunities and risks of the technology for Prince Edward Island, applications, environmental concerns, social issues, and examples of legislation. A copy of this binder was posted to the committees' section of the website of the Legislative Assembly, as part of your Committee's expressed desire to have the consultations as open and transparent as possible.

On **February 2, 2005**, your Committee heard presentations from Dr. Robert Macgregor, a resource economist with a background in biology and economics with the provincial Department of Agriculture, Fisheries and Aquaculture; and Mr. Chris Prouse, Manager, Legislative and Regulatory Services Division of the Department of Agriculture, Fisheries and Aquaculture. Of particular interest was an overview of the types of legislation which restrict the planting of genetically modified crops in various jurisdictions in Europe and North America. The final presenter at this meeting was Dr. Bert Christie, a retired plant scientist. Dr. Christie shared his belief that more scientific scrutiny is required and, therefore, a ban on genetically modified crops could be justified.

Both Dr. Macgregor and Ms. Polland were seconded to your Committee to assist with research and analysis of data.

At your Committee's next meeting, on **February 9, 2005**, Mr. John Argall, the Executive Director of BioAtlantech of Fredericton, NB, made a presentation to your Committee. BioAtlantech is an agency with funding from the federal and New Brunswick provincial governments, which assists life science companies to build capacity in research and development. Mr. Argall recommended that full cost accounting, including such techniques as life-cycle

assessment be used as part of an evaluation of genetically modified crops and that the evaluation of each crop (or trait) be done on a case-by-case basis. At this meeting, your Committee also heard from Dr. Stephen Yarrow, a plant biosafety officer with the Canadian Food Inspection Agency (CFIA). His presentation focused on the regulatory approach and environmental release of plants with novel traits. The final presenter at this meeting was Mr. Peter Feldstein, a private citizen currently developing forty acres on a family farm for organic production. Mr. Feldstein supports a moratorium on genetically modified crops in order for the province to keep its food marketing options open, particularly as it pursues a higher-value organic niche market.

On **February 16, 2005**, your Committee heard presentations from Dr. Daniel Shulman, of the Association of Registered Acupuncturists of Prince Edward Island; Ms. Michelle Swenarchuk, the Director of International Programmes of the Canadian Environmental Law Association; Ms. Marie Burge and Ms. Anne Wheatley of the Cooper Institute; and Ms. Dorena Hall and Ms. Mary Boyd of the PEI Council of Development and Peace, the official international development agency of the Catholic Church. Dr. Shulman spoke of the importance of long-term testing of the safety of genetically modified foods. He pointed out that the technical aspects of genetic manipulation of food are far ahead of the science of impact assessment. Ms. Swenarchuk's presentation highlighted the areas of pesticide use, environmental health risks, the reliability of the Canadian regulatory system; and liability questions. Ms. Burge and Ms. Wheatley shared information gathered at the November 2004 public hearings held by the Cooper Institute centering on food issues. They reported that the majority of presenters and participants at those hearings held common positions on genetically modified foods, and recommended a moratorium be enacted. The final two presenters at the meeting, Ms. Hall and Ms. Boyd, promoted international justice and the fight against poverty. They support mandatory labeling for genetically modified products and specializing in organic production of food in the province.

On **February 23, 2005**, your Committee heard a presentation from Dr. E. Ann Clark, an Associate Professor of Plant Agriculture, specializing in pasture and grazing management, at the University of Guelph. Dr. Clark asked your Committee to consider, during its deliberations, whose interests are being served–are the roles and responsibilities of governments and corporations in conflict? Following Dr. Clark, your Committee heard from Ms. Denise Dewar, Executive Director of Plant Biotechnology for CropLife Canada, a trade association that includes the developers, manufacturers and distributors of pest control products and plant biotechnology. Ms. Dewar assured your Committee that products developed through biotechnology are highly regulated in Canada. and follow an approval pathway to ensure safety which is based on international standards. Her presentation also highlighted opportunities for the province in a completely new type of agricultural production, growing functional foods and nutriceuticals with health-promoting attributes. In contrast, the presentation from Ms. Renata Brillinger, representing Californians for GE-Free Agriculture, warned of the risks of genetically-engineered food production, including contamination of conventionally-grown crops, patenting of seed, and the restriction of certain agricultural practices. Ms. Brillinger encouraged your Committee to consider the vision for the future of agriculture on Prince Edward Island. The next presenter, Mr. Dominique Cruchet, shared a summary of a recent French report on genetically modified

organisms. The final presenter at this meeting, Ms. Sandra Boswell, represented the Allergy and Environmental Illness Association, which is part of a national association. Her main concern centered around safety of genetically modified foods, particularly in relation to allergies.

On **March 2, 2005**, your Committee met with Mr. Gary Renkema, Mr. Leo Broderick, Mr. David Daughton, Ms. Marion Copleston and Dr. Kevin Arsenault.

Mr. Renkema spoke of his personal experiences in growing genetically modified soybeans for approximately five years. He mentioned the advantages of a reduction in tilling, which has saved him time, and reduced erosion on his high-sloped land. He has been able to reduce the amount of chemicals he uses and has seen a higher crop yield. Mr. Broderick presented to your Committee on behalf of the Council of Canadians, a citizens watchdog organization. He shared his vision of a new model for agriculture on Prince Edward Island which focuses on small-scale, local and family farm operations that are environmentally sound. Mr. Daughton represented the Eastern Cooperative Health Organization, a national non-profit organization which provides web-based health information. He asserted that genetically-modified-free food production would give Island producers an significant advantage in marketing their agricultural products. Ms. Copleston commended your Committee for its work on genetically modified organisms. She had specific concerns about the small number of corporations involved with, and gaining control of, something as basic as our food supply. Dr. Arsenault has conducted long-term research into agricultural issues on Prince Edward Island. He shared his concerns about corporate control of our food system, as well as the lack of an adequate financial return to farmers. He agreed with previous presenters regarding the particular advantage available to Prince Edward Island if the province could be marketed as being genetically-modified-free.

Your Committee next met to consider this issue on **March 9, 2005.** At this meeting, it heard presentations from Mr. David Mol, Mr. Alan Ling, Mr. Mark MacDougall, Mr. Steven Belaire and Mr. Gary Clausheide.

Mr. Mol presented to your Committee as the President of the Prince Edward Island Grain and Protein Council, and also on behalf of his own business, Meadowbrook Farms. He shared his belief that the only justification for moving to a genetically modified free position for the province would be financial; that is, increased profit for producers. Mr. Ling, chair of the Atlantic Grains Council, spoke of the competitive disadvantage Canadian farmers experience because of high rates of subsidization in other regions of the world. He indicated his concern for the future of farming in Canada given this situation. Mr. Ling left the Committee with two questions to consider: Has it been demonstrated that consumers will pay more for genetically-modified-free products? Has it been proven that genetically modified organisms are harmful to the environment or to human health? Mr. Mark MacDougall, of the Environmental Health Cooperative, was joined by Ms. Jeanne Maki in his presentation to your Committee. The Cooperative is a volunteer organization concerned about long-term health effects of contaminants in both indoor and outdoor environments. In this presentation, your Committee was told of the growing market in organic food, with sales projections reaching $3.1 billion worldwide in 2005.

Mr. Belaire, a private citizen, maintained that there are deleterious health effects caused by genetically modified organisms, citing a study conducted on Monarch butterflies. Mr. Clausheide, an organic farmer, reiterated the desire of several other presenters to see a new vision for agriculture on Prince Edward Island to replace the prevailing model of chemical agriculture. He remains concerned about the human and environmental health effects of genetically modified organisms.

At this meeting, your Committee determined the need to seek a legal opinion as to whether the production of genetically modified organisms could be banned, by legislation, in Prince Edward Island. On March 15, 2005, an opinion was provided by Ms. Judy Haldemann, Legislative Counsel with the Office of the Attorney General. It states that, in her opinion, "there are no laws passed by Parliament and no federal regulations currently in force that would preclude the passage of provincial legislation that might ban or restrict the use of (planting of) GMOs in the province." She went on to state that, "such legislation, if drafted, must be carefully crafted in its definitions and care must be taken to ensure that it would not conflict with or contradict any current federal legislation or regulations."

On **May 19, 2005**, your Committee met *in camera* to begin consideration of its interim report to the Members of the Legislative Assembly.

In addition to the nine meetings convened to consider this issue, your Committee spent considerable time studying many written submissions it received over the time period.

Public Response

Public response to the advertisements placed in provincial daily and weekly newspapers in January 2005 was strong and immediate, and originated from Prince Edward Island, other provinces across the country, the United States, the United Kingdom, Europe, People's Republic of China, and Japan. Your Committee reports that this issue triggered the largest response it has ever received to a call for input, and included interest from many private citizens, universities, religious groups, political organizations, industry groups, environmental and social activists, organic and conventional producers, agricultural organizations, and others. Members of your Committee, and the office of the Clerk of Committees received hundreds of telephone calls, letters, emails, faxes, and personal contacts on the issue. In addition, there was a great deal of media interest, both local and national, in the work of your Committee. For example, the CBC television program "Land and Sea" filmed a portion of your Committee's meeting of March 2, 2005, for a recent broadcast.

To date, your Committee has completed its consideration of 105 presentations, including both written submissions and oral presentations, from members of the public; and has reviewed a further 32 briefing notes prepared by staff of the provincial Department of Agriculture, Fisheries and Aquaculture. There are 57 additional persons who have indicated they wish to make representation to your Committee, which will bring the total number of interveners to 162.

Request to Meet Intersessionally

The issue of biotechnology, including genetically modified organisms, is complex. Your Committee has heard a number of themes emerge throughout the public phase of its consultations to date, including the potential of such organisms to provide significant benefits, as well as scientific, economic, social, environmental, ethical and human health concerns. Your Committee thanks all presenters for their time, interest and commitment to the best possible future for Prince Edward Island. However, it reports that there is more to do. There are still a number of respondents to the call for public input who are to appear before your Committee to present their views. As well, your Committee must ensure it hears the most comprehensive response possible, and may decide to issue invitations to select parties in order to receive the input it requires.

At this time, your Committee thanks Ms. Louise Polland, who retired from the provincial government as of the end of April 2005. Her research and analysis have been most helpful, and your Committee wishes her well as she pursues the next challenges in her professional career. Your Committee looks forward to continuing its work with Dr. Bob Macgregor.

By receipt and adoption of this report, your Committee seeks permission to continue its consideration of this matter beyond prorogation of the Second Session of the Sixty-second General Assembly, and report in the fall sitting of the Legislative Assembly.

Respectfully submitted,

Wilbur MacDonald, MLA
Chairman
Standing Committee on Agriculture, Forestry and Environment